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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,033	04/29/2005	Pekka Kangasniemi	7831.1019	2853
21831 7590 05/03/2007 WOLF BLOCK SCHORR AND SOLIS-COHEN LLP 250 PARK AVENUE NEW YORK, NY 10177			EXAMINER KILKENNY, PATRICK L	
			ART UNIT 3732	PAPER NUMBER
			MAIL DATE 05/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/517,033

Applicant(s)

KANGASNIEMI, PEKKA

Examiner

Patrick J. Kilkenney

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/12/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riitano et al. (6,575,747). Riitano et al. discloses and a root canal instrument with a metallic needle part (24) and a substantially continuous gripping end, which can be gripped by the fingers, of homogeneous structure (22). Riitano et al. also discloses that the handle be made of deformable plastic material such that the coefficient of kinetic friction is higher than that of metal (Column 16, lines 42-48). There is also an embodiment where the gripping end has a surface layer (700') and there is a layer (410) underneath the surface layer. Since Riitano et al. discloses that the file part of the instrument is made from strong resilient metal and the handle is made from deformable plastic, it is inherent that the surface layer material of handle (700') has a lower hardness than that of the underneath layer (410), since it is continuous with the metallic needle part. Riitano et al. does not disclose the ranges of coefficient of kinetic friction or Shore hardness of the layers of the gripping end that are claimed. However, it would have been obvious to one having ordinary skill in the art at the time the invention was

made to manufacture the root canal instrument within the specifically claimed ranges of the coefficient of kinetic friction and shore hardness, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Furthermore, Rittano et al. discloses the fact that a plastic material is used on the handle to be deformable and have a higher coefficient of kinetic coefficient than that of metal. Therefore, a teaching exists for modify theses specific variables to obtain a handle that has the ideal hardness and coefficient of kinetic friction.

Response to Arguments

Applicant's arguments filed 1/25/2007 have been fully considered but they are not persuasive. The applicant's first argument is that Riitano makes not mention of the plastic outer surface being recoverably deformable. The applicant argues that the retention arms of the chuck press into the deformable handle to grasp it, but there is not indication the when the handle is removed it would return to its original shape. The examiner disagrees and believes that the recovery reformation is inherent and essential. If it were not for this property, the handle would continually shrink in diameter, rendering its essential function of creating a frictional fit with the chuck moot.

The applicant's second argument suggests that the friction associated with the handle is that of the locking mechanism with the chuck and not a result of the actual coefficient of friction of the material itself. However, Riitano clearly separates these two elements in Column 16, lines 41-47. Riitano states that, "The ability to engage a handle

such as handle 12 is further augmented when handle 12 is formed by a plastic material that provides greater friction than the metal handle, especially plastic materials that are deformable." This clearly indicates that the surface itself has a higher coefficient of friction compared to metal in addition to the friction created with the locking chuck.

Thirdly, the applicant argues that Riitano does not teach an outer surface material of the gripping end having a coefficient of friction higher than 0.4 and having a shore hardness in the range of 10—95 Shore A. The examiner never suggested that Riitano alone meets this claims.

Fourthly, the applicant argues that Riitano cannot be modified to have the claimed coefficient of friction on the outer surface of the gripping material because the claimed soft deformable gripping end would be too unstable for retention by the chuck. The examiner disagrees considering that Column 16, lines 41-47, as mentioned above, suggest that it is this deformable soft nature that allows for the proper retention of the handle with the chuck.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

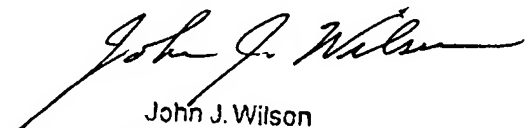
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Kilkenney whose telephone number is (571) 272-8684. The examiner can normally be reached on Mon-Fri, 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Patrick J. Kilkenney



John J. Wilson
Primary Examiner